FRISH, V.A.

Forest corner. Geog. v shkole 22 no.1:55-58 Ja-F '59.
(MIRA 12:4)

1. Georgiyevskaya shkola Mezhevskogo rayona Kostromskoy oblasti.
(Forest and forestry)

FRISH, V. A., Cand Geogr Sci (diss) -- "Experience in landscape characterization of Mezhevskiy Rayon, Kostroma Oblast". Leningrad, 1960. 17 pp (Leningrad Order of Lenin State U im A. A. Zhdanov), 225 copies (KL, No 15, 1960, 132)

PASYNOK, M.V.; FRISH, V.A. (Sverdlovsk); KUPRIN, M.

Letters to the editor. Geog.v shkole 24 no.3:65-68 My-Je '61.
(MIRA 14:5)

1. Nedryanskaya shkola Kiyevskiy oblasti (for Pasynok). 2. 14-ya shkola g. Kurgana (for Kuprin).
(Physical geography—Study and teaching)

FRISH, V.A., kand.geograf.nauk

Vladimir Alekseevich Batmanov's sixtieth birthday. Okhr.prir. na Urale no.3:161-166 '62. (MIRA 16:6)
(Batmanov, Vladimir Alekseevich, 1900)

FRISH, V.A.

Theoretical problems in the study of landforms. Dokl. Inst. geog. Sib. i Dal'. Vost. no.7:42-50 '64. (MIRA 18:10)

FRICH, V.A., kand.geograf.nauk; TITKOVA, N.V. (Kharanor)

Ono-Argun Steppe. Priroda 53 no.8:126-127 '64. (MIRA 17:9)

FRISH, V.A.

Vladimir Alekseevich Batmanov, 1900- ; on his 60th birthday.
Zap.Ural fil. Geog. ob-va SSSR no.4:171-176 '61.
(MIRA 18:12)

FRISH, V.A.

Some foreign works in the field of landform study. Dokl. Inst. geog. Sib. i Dal'. Vost. no.3:60-67 '63.

(MIRA 18:12)

FRISH, V.A.

Distinctive natural areas as geographical systems (as exemplified by studies on the natural geographical areas of Sysert' District). Sib. geog. sbor. no.4:199-243 '65. (MIRA 18:12)

FRISH, V. F., MAKAROV, A. N., DOROTA, P. P.

"New Methods in Borehole Logging of Brown Coal Deposits"

(New Developments in the Methods and Techniques of Geological Exploration) Leningrad, Gostoptekhizdat, 1958. 423 p. (Series: Its: Sbornik trudov I)

MAKAROV, A.N.; FRISH, V.F.; DOROTA, P.P.

New method for logging boreholes in lignite deposits. Trudy VITR no.1:341-356 '58. (MIRA 12:1)
(Logging (Geology)) (Lignite)

POPOV, A.A.; FRISH, V.F.

Practive of using the method of radio waves transmitted from boreholes in prospecting for complex ore deposits. Uch. zap. SAIGIMSa no.8:177-181 '62. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.

FRISHBERG, A.A.

Investigation of the photometric properties of "spectral" plates produced by Factory No.2 in types I, II, and III. Izv. AN SSSR. Ser. fiz. 19 no.1:131-132 Ja-F '55. (MLRA 8:9)

1. Komissiya po spektroskopii pri Otdelenii fiziko-matematicheskikh nauk Akademii nauk SSSR.
(Spectrum analysis) (Spectrometer)

FRISHBERG, A.A.

FAL'KOVA, O.B., FRISHBERG, A.A.

Investigation of the uniformity of characteristics of various surface areas of photographic films. Zav.lab. 21 no.3:336-341 '55. (MLRA 8:6)

(Photographic emulsions)

A.A. Frishberg

24(7) PHASE I BOOK EXPLOITATION SOV/1700

Lvov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy) /Lvov/ Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Its: Fizicheskiy sbornik, vyp.4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); B.S. Neporent, Doctor of Physical and Mathematical Sciences; I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; V.G. Koritskiy, Candidate of Technical Sciences; S.M. Rayskiy, Candidate of Physical and Technical Sciences; L.K. Klimovskaya, Candidate of Physical and Mathematical Sciences; V.S. Miliyanchuk (Deceased), Doctor of Physical and Mathematical Sciences; A.Ye. Glauberman, Doctor of Physical and Mathematical Sciences; Ed.: S.L. Gazer; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectrography presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and minerals, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables, and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

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Materials of the 10th All-Union Conference (Cont.) SOV/1700

Rusanov, A.K., and V. G. Khitrov. Spectral Analysis of Ores by Blowing Powder Samples Into the Arc Discharge 102

Nedler, V.V., and A.A. Frishberg. Reasons for Reproducibility Improvement in Spectrum Analysis by the Spilling Method 105

Ivanov, N.P. Spectral Determination of the Uranium Content of Ores and Intermediate Products by the Isotope Addition Method 109

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Prokof'yev, V.K., T.M. Moroshkina, and I.V. Bogdanova. Spectrochemical Analysis of Rare Elements in Complex Solutions by Ion-exchange Adsorption 112

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Card 8/31

FRISHBERG, A.A.

21(0),24(0) PHASE I BOOK EXPLOITATION SOV/32

Akademiya nauk SSSR. Fizicheskiy institut

Issledovaniya po eksperimental'noy i teoreticheskoy fizike; [sbornik] (Studies on Experimental and Theoretical Physics; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 334 p. Errata slip inserted. 2,300 copies printed.

Ed.: I. L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; Ed. of Publishing House: A. L. Chernyak and V. G. Barkauskas; Tech. Ed.: Yu. V. Rylina; Commission for Publishing the Collection in Memory of Grigoriya Samuilovich Landsberg: I. Ye. Tamm (Chairman), Academician; N. A. Leontovich, Academician; P. A. Bazhulin, Doctor of Physical and Mathematical Sciences; S. L. Mandel'shtam, Doctor of Physical and Mathematical Sciences; I. L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; P. S. Landsberg-Baryakhtarskaya, Candidate of Physical and Mathematical Sciences; and G. P. Motulevich (Secretary), Candidate of Physical and Mathematical Sciences.

PURPOSE: This book is intended for physicists and researchers engaged in the study of electromagnetic radiations and their role in investigating the structure and composition of materials.

COVERAGE: The collection contains 30 articles which review investigations in spectroscopy, sonics, molecular optics, semiconductor physics, nuclear physics, and other branches of physics. The introductory chapter gives a biographical profile of G. S. Landsberg, Professor and Head of the Department of Optics of the Division of Physical Technology at Moscow University, and reviews his work in Rayleigh scattering, combat plasma, spectral analysis of metals, etc. No personalities are mentioned. References accompany each article.

Mogerut, R. S. Kinetics of the Action of Light Gases on the Intensity of Absorption Spectra of Vapors of Aromatic Compounds 149

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FRISHBERG, A. A., Cand Tech Sci (diss) -- "The use of chemical reactions in the crater of a carbon electrode for spectral determination of small quantities of tellurium and indium in ores and products of their processing". Moscow, 1960. 12 pp (Min Geol and Protection of Mineral Wealth USSR, All-Union Inst of Mineral Raw Materials), 150 copies (KL, No 11, 1960, 134)

S/081/62/000/019/010/053
B144/B180

AUTHOR: Frishberg, A. A.

TITLE: Improvement to the technique of spectral determination of some trace elements in ores

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1962, 117, abstract 19D91 (Sb. materialov po gorn. delu, obogashcheniyu i metallurgii, Tsentr. n.-i. gornorazved. in-t, no. 6, 1961, 85 - 90)

TEXT: To increase the sensitivity and accuracy of the analysis the specimens receive additions which, in the crater of a carbon electrode, form high vapor pressure compounds with the elements to be determined. Tests made with standards prepared from indium oxide on different bases show that I_2 as reagent reduces the effect of the base in the In determination and eliminates the effect which the form of the compound has on the accuracy of the analysis. For different Te compounds and metallic Te mixed with iodine the Te evaporation curves are similar, which means that the Te iodide always evaporates from the electrode and enters the discharge arc at the

Card 1/2

Improvement to the ...

same rate. For the quantitative determination of Te, a weighed portion of 0.1 g is mixed with 0.1 g buffer mixture consisting of 10 parts iodine and 1 part Na_2CO_3. Graphs are plotted from the sensitive lines, and in the case of high concentrations the Te line 2259 Å is photometrically measured. The mean square error in determination of In and Te is 14 and 8%, respectively. [Abstracter's note: Complete translation.]

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FRISHBERG, A.A.; ORESHONKOVA, T.I.

Temperature changes in specimens and the importance of heating electrodes for chemical reactions in the electrode chamber. Izv. AN SSSR. Ser. fiz. 26 no.7:889-892 Jl '62. (MIRA 15:8)
(Temperature--Measurement) (Electrodes)

FRISHBERG, A.A.

Increased determination sensitivity with the aid of chemically active "carriers "; a review. Zhur. prikl. spekt. 3 no. 2: 187-195 Ag '65. (MIRA 18:12)

1. Submitted April 19, 1965.

FRISHBERG, A.N.

Experimental psychological study of abstract thinking in patients with chronic alcoholism. Vrach. delo no.11: 147-148 N'63 (MIRA 16:12)

1. Kiyevskaya oblastnaya psikhonevrologicheskaya bol'nitsa.

FRISHBERG, A.N.

Comparative study of the formation of remissions in the paranoid form of schizophrenia in the process of treatment with aminazine and insulin. Vop.klin., patog. i lech. shiz. no.1:145-148 '64. (MIRA 18:5)

1. Laboratoriya eksperimental'noy patopsikhologii (zav. - doktor pedagogicheskikh nauk B.V.Zeygarnik) i otdel psikhofarmakologii (zav. - kand.med.nauk G.Ya.Avrutskiy) Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR.

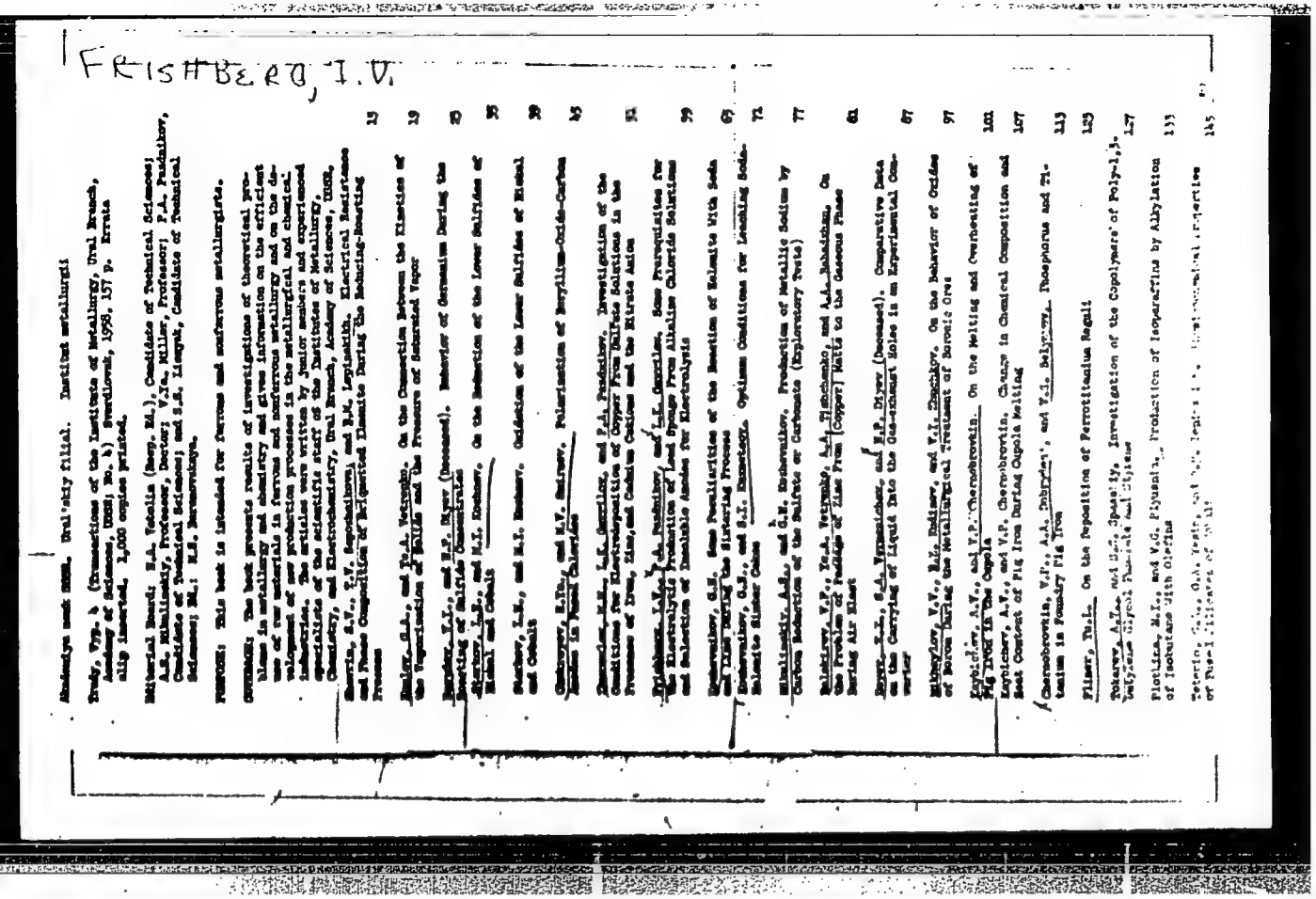
EPSHTEYN, T.V.; FRISHBERG, I.A.

Surgical treatment of pulmonary tuberculosis; a review of literature. Grud. khir. 6 no.2:104-110 Mr-Ap '64. (MIRA 18:4)

1. Moskovskaya gorodskaya tuberkuleznaya bol'nitsa No.3 "Zakhar'ino" (glavnyy vrach V.P.Petrik).

FRISHBERG, I.V.; PAZDNIKOV, P.A.; GAVRILOV, L.K.

Certain prerequisites for the electrolytic preparation of lead sponge from alkali metal chloride solutions and selection of insoluble anodes for electrolysis. Trudy Inst. met. UFAN SSSR no.4:59-64 '58. (MIRA 12:10)
(Lead--Electrometallurgy)



FRISHBERG, I.V.

Metallurgy and Mining. Ural'skiy filial. Institut metallurgii

Trudy, Vyp. 3 (Transactions of the Institute of Metallurgy, Ural Branch, Academy of Sciences, USSR) No. 3) Sverdlovsk, 1958. 157 p. Errata slip inserted. 1,000 copies printed.

Editorial Board: N.A. Tikhilin (Resp. Ed.), Candidate of Technical Sciences; A.S. Mikhaylovskiy, Professor, Doctor; V.Ye. Miller, Professor; P.A. Prokhorov, Candidate of Technical Sciences; and S.S. Ilimpiy, Candidate of Technical Sciences; Ed.: N.S. Berezovskaya.

PURPOSE: This book is intended for persons and enterprises metallurgists.

COVERAGE: The book presents results of investigations of theoretical problems in metallurgy and gives information on the efficient use of raw materials in ferrous and nonferrous metallurgy and on the development of new production processes in the metallurgical and chemical industries. The articles were written by junior members and experienced specialists of the scientific staff of the Institute of Metallurgy, Chemistry, and Electrochemistry, Ural Branch, Academy of Sciences, USSR.

Borisov, A.V., V.V. Kapshukhin, and B.M. Lepinskikh. Electrical Resistance and Phase Composition of Briquetted Dimicts During the Reducing-Roasting Process 29

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MIKULINSKIY, A.S. (Sverdlovsk); FRISHBERG, I.V. (Sverdlovsk)

Possibility of preparing liquid magnesium by the condensation of its vapor from argon mixtures at atmospheric pressure. Izv.AN SSSR.Otd.tekhn.nauk, Met.i topl. no.5:28-30 S-O '61. (MIRA 14:10)

(Magnesium) (Condensers (Vapors and gases))

ASTAF'YEVA, M.N.; VETRENKO, Ye.A.; MIKULINSKIY, A.S.; FRISHBERG, I.V.

Rossiter-Yarwood's formula for calculating the coefficient of condensation. Zhur. fiz. khim. 38 no.2:523-525 F '64. (MIRA 17:8)

1. Institut metallurgii Ural'skogo filiala AN SSSR.

FRISHBERG, I. V.; MIKULINSKIY, A. S.

Variation of the mass transfer coefficient during the condensation of magnesium vapors from a mixture with helium. Dokl. AN SSSR 147 no.4:886-888 D '62. (MIRA 16:1)

1. Institut metallurgii Ural'skogo filiala AN SSSR. Predstavleno akademikom S. I. Vol'fkovichem.

(Magnesium) (Helium) (Mass transfer)

FRISHBERG, I.V.; MIKULINSKIY, A.S.

Prospects for developing the silicothermal method of magnesium production. Izv. Sib. otd. AN SSSR no.2:63-66 '62.
(MIRA 16:10)

1. Ural'skiy filial AN SSSR, Sverdlovsk.

FRISHBERG, I.V.; MIKULINSKIY, A.S.; VETRENKO, Ye.A.

Device for measuring the quantity of a condensing substance.
Zav. lab. 29 no.9:1143-1144 '63. (MIRA 17:1)

1. Institut metallurgii Ural'skogo filiala AN SSSR.

ACC NR: AT7004208 SOURCE CODE: UR/0000/66/000/000/0069/0073

AUTHORS: Mikulinskiy, A. S.; Frishberg, I. V.

ORG: none

TITLE: Investigation of condensation of magnesium vapors from a mixture of magnesium vapor and helium gas

SOURCE: AN SSSR. Institut metallurgii. Eksperimental'naya tekhnika i metody vysokotemperaturnykh izmereniy (Experimental techniques and methods of high temperature measurement). Moscow, Izd-vo Nauka, 1966, 69-73

TOPIC TAGS: magnesium, helium, metal vapor deposition

ABSTRACT: An apparatus for determining the mass transfer coefficient during metal vapor condensation from a mixture of metal vapor and permanent gas was developed. A schematic of the apparatus is presented (see Fig. 1). This apparatus was used for determining the rate of condensation of magnesium vapors from a helium-magnesium vapor mixture. The experimental results are shown graphically. It was found that the condensation rate obeyed the Stephan-Maxwell law. Ye. A. Vetrenko participated in

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ACC NR: AT7004208

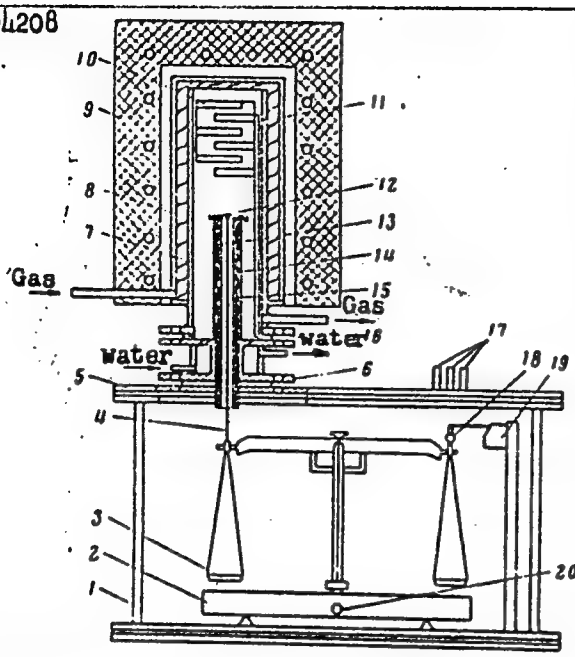


Fig. 1. Apparatus for determining the mass of condensed substance. 1 - balance case; 2 - balance; 3 - counterweight; 4 - steel shaft; 5 - upper removable hood; 6 - lower flange of reaction vessel; 7 - reaction vessel; 8 - steel screen; 9 - furnace; 10 - evaporator; 11 - steel shield; 12 - condensation surface; 13 - inlet pipes; 14 - steel cylinder; 15 - steel bushing; 16 - thermocouple; 17 - outlets for vacuum pump, gas and measuring devices; 18 - damping cup; 19 - magnetic damper; 20 - arrest

the investigation. Orig. art. has: 3 graphs and 1 equation.

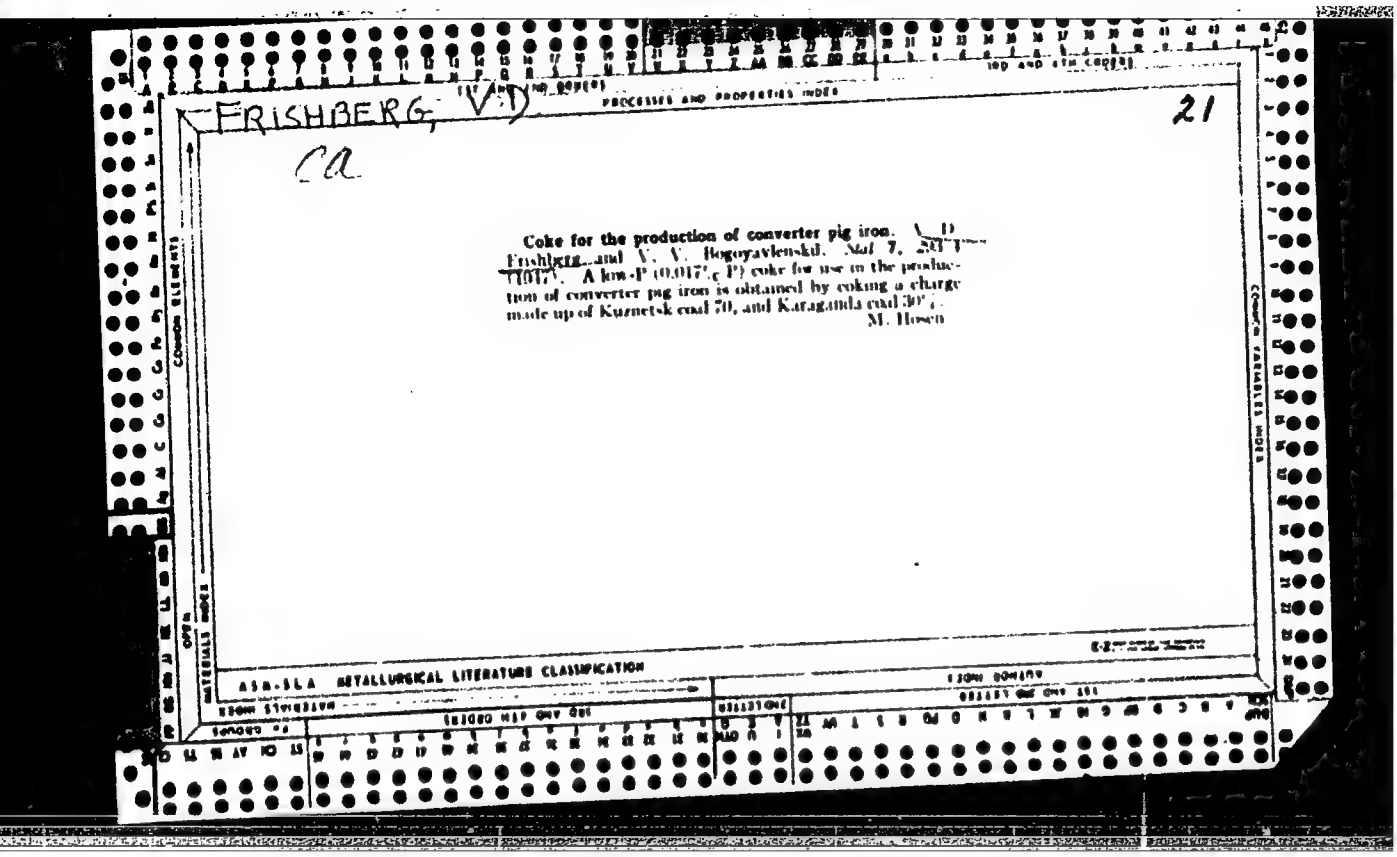
SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001

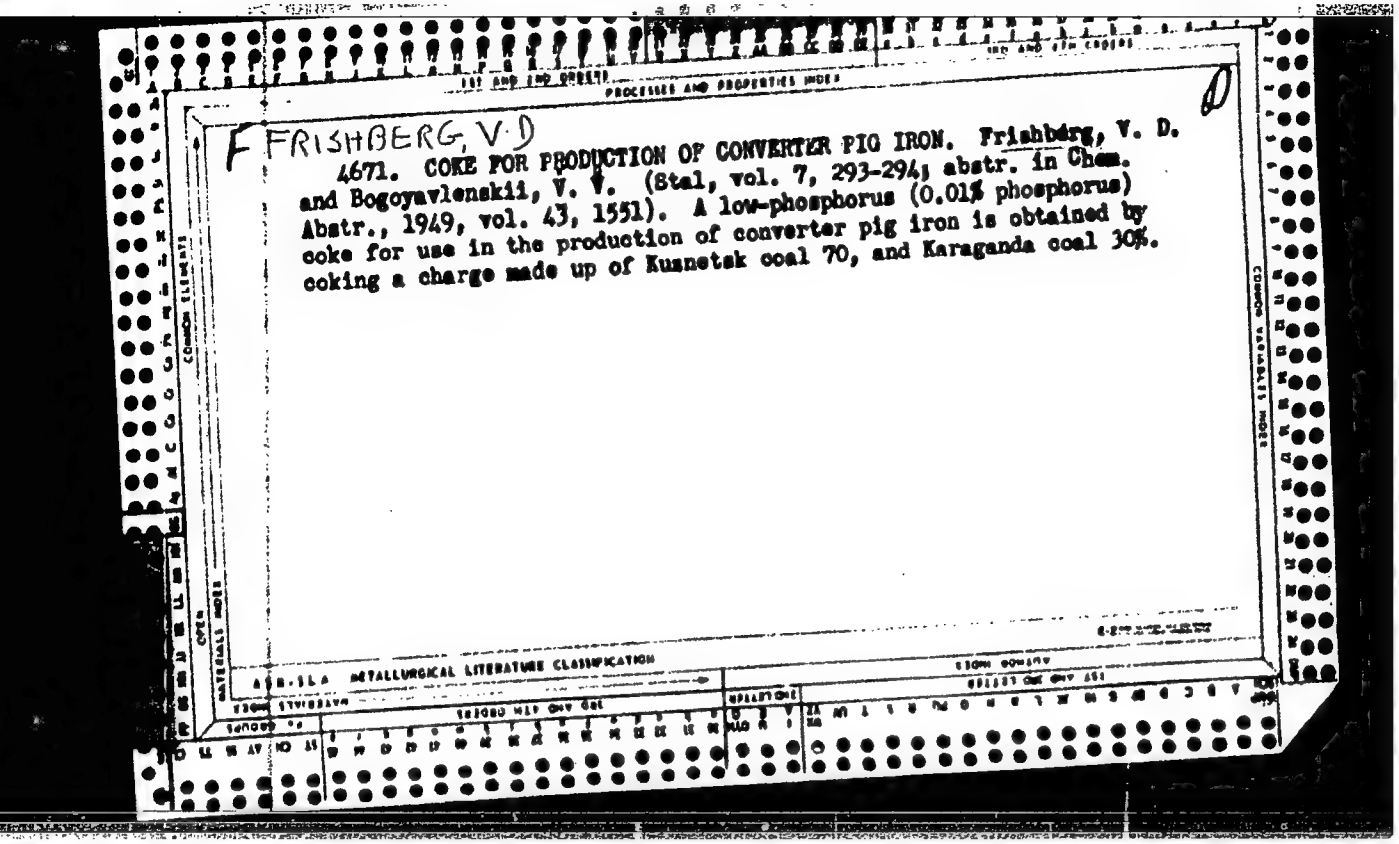
Card 2/2

FRISHBERG, M.F., inzh., red.; MUNITS, A.P., red.izd-va; GILENSON, P.G., tekhn.red.

[Work norms in design and research paid by the operation] Normy vyrabotki na proektnye i izyskatel'skie raboty, oplachivaemye sdel'no. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam. Pt.27. [Electric systems] Elektrotekhnicheskie ustanovki. 1959. 227 p. (MIRA 13:11)

1. Russia (1917- R.S.F.S.R.) Ministerstvo stroitel'stva. (Electric engineering)





F FRISHBERG, V.D

4671. COKE FOR PRODUCTION OF CONVERTER PIG IRON. Frishberg, V. D. and Bogoyavlenskii, V. V. (Stal, vol. 7, 293-294; abstr. in Chem. Abstr., 1949, vol. 43, 1551). A low-phosphorus (0.01% phosphorus) coke for use in the production of converter pig iron is obtained by coking a charge made up of Kuznetsk coal 70, and Karaganda coal 30%.

FRISHBERG, V.D.

Technological characteristics of impoverished coals. V. D. Frishberg, Z. P. Balabanova, M. E. Popova, and I. G. Barkhatisova. *Stal* 1954, No. 2, 116-19; *Referat. Zhur., Khim.* 1956, Abstr. No. 13603.—The existing methods of detn. of properties of impoverished coals are inadequate. Only Donets coals can be evaluated by their index of clinkering; Pechorsk and Kuznets coals have a heterogenic petrographic compn. and contain 45-65% vitrain matter; hence, they cannot be evaluated by the index of clinkering. Evaluation of properties of impoverished coals should be based on their petrographic compn., on the character of trace components, and, 1st of all, on the amt. of the fraction rich in a homogeneous vitrain matter on which depend their clinkering properties. Lustrous Donets coals are the best impoverishing addns. contg. a large amt. of homogeneous vitrain with a max. clinkering capacity. Only those impoverished coals that contain a vitrain material that does not appear to clinker should be referred to as noncaking coals. The properties of impoverished coals and the tendency to clinker are best characterized by the degree of swelling. The method of calcn. of charges of impoverished coals should be based on the detn. of swelling and on the investigation of trace components. J. Miosrewska

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FRISHBERG, V.D.; POPOVA, M.Ye.; PERMITINA, K.S.

Properties of dull components (durain) of coals from the Balakhonka series in the Kuznetsk Basin. Koks i khim.no.2:5-12 '56.(MLRA 9:7)

1.Vostochnyy uglekhimicheskiy institut.
(Kuznetsk Basin--Coal--Analysis)

FRISHBERG V.D

AFONIN, K.B.; BURTSEV, K.I.; BYSTROV, S.N.; VINETS, G.B.; VODNEV, G.G.; VORONIN, A.S.; GEVLICH, A.S.; GRYAZNOV, N.S.; GUDIM, A.F.; GUSYATINSKIY, M.A.; DVORIN, S.S.; DIDENKO, V.Ye.; DMITRIYEV, M.M.; DONDE, M.M.; DOROGOBID, G.M.; ZHDANOV, G.I.; ZAGORUL'KO, A.I.; ZELENETSKIY, A.G.; IVASHCHENKO, Ya.N.; KAFTAN, S.I.; KVASHA, A.S.; KIREYEV, A.D.; KLISHEVSKIY, G.S.; KOZYREV, V.P.; KOLOBOV, V.N.; LGALOV, K.I.; LEYTES, V.A.; LERNER, B.Z.; LOBODA, N.S.; LUBINETS, I.A.; MANDRYKIN, I.I.; MUSTAFIN, F.A.; NEMIROVSKIY, N.Kh.; NEFEDOV, V.A.; OBUKHOVSKIY, Ya.M.; PERTSEV, M.A.; PETROV, I.D.; PODOROZHANSKIY, M.O.; POPOV, A.P.; RAK, A.I.; REVYAKIN, A.A.; ROZHKOV, A.P.; ROZENGAUZ, D.A.; SAZONOV, S.A.; SIGALOV, M.B.; STOMAKHIN, Ya.B.; TARASOV, S.A.; FILIPPOV, B.S.; FRIDMAN, N.K.; FRISHBERG, V.D.; KHAR'KOVSKIY, K.V.; KHOLOPTSEV, V.P.; TSAREV, M.N.; TSOGLIN, M.E.; CHERNYY, I.I. CHERTOK, V.T.; SHELKOV, A.K.

Samuil Borisovich Bamme. Koks i khim. no.6:64 '56. (MLRA 9:10)
(Bamme, Samuil Borisovich, 1910-1956)

FRISHBERG, V.D.

2939. MODIFIED METHOD FOR DETERMINING SWELLING OF COALS. Frishberg, V.D., Berkhatinova, T.G. and Kolabanova, Z.P. (Zavod. Lab. (Fact. Lab., Moscow), 1954, vol. 20, (3), 324-326; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1956, (13), 40619). A modification is described for the dilatometer of Tsits, E.M., and others (Zavod. Lab. (Fact. Lab., Moscow) 1948, vol. 14, 10). The wall thickness of the steel housing of the furnace is reduced from 35 to 9 mm so as to decrease the rate of heating of the coal briquette. The sample used is 2 g, which may include an admixture of coke if the coal has a high swelling index. Data are given on the properties of [illegible] their petrographic types and degree of oxidation, and their swelling as determined with the modified apparatus.

519

AUTHOR: Peremitina, K.S. and Frishberg, V.D. (VUKhIN)

TITLE: Coals of the Kol'chuginsk strata of the Kuznetsk Basin as a raw coking material. (Ugli Kol'chuginskoy svity Kuznetskogo Basseyna kak syr'e dlya koksovaniya.)

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No. 4, pp. 3 - 8, (U.S.S.R.)

ABSTRACT: A short characteristic of coals from main deposits of the Kolchuginsk strata is given. In order to evaluate their coking properties, a systematic investigation on laboratory, pilot plant and in some cases on a full industrial scale was carried out, In Table 1 quality characteristics (technological group, vitrinite content, plastometric indices, ash and volatile contents) of typical coals from the Kolchuginsk strata (mainly gas and fat coals) and the physical properties of coke produced on a pilot plant scale are given. Results of pilot plant coking of binary mixtures with a diluting coal of the TS sh.9-15 group from the Anzhersk deposit are given in Table 2. The results of the pilot plant coking experiments were, to a considerable extent, confirmed on industrial ovens (Table 3). On the basis of the results obtained the following is recommended: 1) increase in the volume of prospecting and industrial mining in some sector of the above deposits; 2) improvement in beneficiation methods; 3) utilisation of gas coals in blends of Eastern coking plants; 4) in order to utilise gas coals of a low coking

68-58-5-1/25

AUTHORS: Frishberg, V.D., Permitina, K.S. and Myuller, I.P.

TITLE: Coals of the Balakhonsk Series of the Kuznetsk Basin as a Raw Material for Coking (Ugli balakhonskoy svity Kuznetskogo basseyna kak syr'ye dlya koksovaniya)

PERIODICAL: Koks i Khimiya, 1958, Nr 5, pp 3 - 9 (USSR).

ABSTRACT: Coals from measures of the second coal-bearing series of the Kuznetsk Basin (Balakhonsk) are characteristic in their non-uniform structure. The content of vitrite varies from 20 to 70% and their rank from gas coals to lean coals. Technological characteristics of the main types of these coals are given in Table 1 and the results of their coking on a pilot plant scale - Table 2 and the figure. At present, these coals are utilised in the blends of the Eastern Works, in a proportion of up to 60%. On the basis of the experimental results obtained, it is proposed to introduce some changes in the technological groupings of the above coals assigned to them at present. There are 2 tables and 1 figure.

ASSOCIATION: VUKhIN

Card 1/1

SOV/68-59-1-3/26

AUTHORS: Frishberg, V.D., Permitina, K.S. and Sokolov, V.Z.

TITLE: Geological Reserves of Coal in the Kuznetskiy Basin as a Factor Determining the Direction of Development of the Coking Technology (Geologicheskiye zapasy uglya Kuznetskogo basseyna kak faktor, opredelyayushchiy napravleniya razvitiya tekhnologii koksovaniya)

PERIODICAL: Koks i Khimiya, 1959, Nr 1, pp 10 - 13 (USSR)

ABSTRACT: As the main effort in the future development of the iron and steel industry will be concentrated in the Eastern economic regions, the Kuznetskiy basin will become the main supply source of coking coals for these regions. Proved coal reserves of the basin and their distribution according to technological coal types are discussed (Tables 1, 2). It is concluded that proved reserves of coals suitable for coking amount to about 11 milliard tons, i.e. sufficient for 70-100 years. The distribution of coals reserves between the individual technological coal types can secure the increase in the output of coke up to 60-65 million tons per year, providing preferential crushing and new coking technology (Ref 5) are employed.

Card1/2

SOV/68-59-1-3/26

Geological Reserves of Coal in the Kuznetsk Basin as a Factor Determining the Direction of Development of the Coking Technology

With the conventional coking technology the yearly output of coke can reach 35 million tons. The main effort in prospecting work should be directed towards finding soft coals. There are 2 tables and 6 Soviet references.

ASSOCIATION: VUKhIN

Card 2/2

MYULLER, I.P.; FRISHBERG, V.D., kand.tekhn.nauk

Blending of coals in mines and in coal preparation plants of the Kuznetsk Basin. Koks i khim. no.1:6-10 '60. (MIRA 13:6)

1. Vostochnyy uglekhimicheskiy institut.
(Kuznetsk Basin—Coal preparation)

S/081/61/000/021/063/094
B138/B101

AUTHORS: Permitina, K. S., Frishberg, V. D.

TITLE: Coals of the Kuznetsk Basin

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 396, abstract 21M24 (Sb."Podgotovka i koksovaniye ugley, Sverdlovsk, Metallurgizdat, no. 2, 1960, 3-31)

TEXT: A detailed description of the Kuznetsk coals. The petrographic, technical and technological characteristics of the coals are given; certain laws governing variations in properties are revealed, and information regarding the structure of the reserves is provided, together with other points of interest. In conclusion it is indicated that the evaluation of the data obtained by exploratory and preliminary prospecting opens up the prospect of a considerable increase in reserves of fat coals in the near future. There are 22 references. [Abstracter's note: Complete translation.]

Card 1/1

FRISHBERG, V.D.; SAZONOV, S.A.

Developing the resources of raw materials for coking in the East of the U.S.S.R. Koks i khim. no.5:6-9 '60.
(MIRA 13:7)

1. Vostochnyy uglekhimicheskiy institut (for Frishberg).
2. Gosplan RSFSR (for Sazonov).
(Coke industry)

FRISHBERG, V.D.; SUKHENKO, S.I.

Coking time for coal charges containing an increased amount of gas coal from the Kuznetsk Basin. Koks i khim. no.8:11-12 '60.
(MIRA 13:8)

1. Vostochnyy uglekhimicheskiy institut (for Frishberg). 2. Kuznetskiy metallurgicheskiy kombinat im. I.V.Stalina (for Sukhenko).
(Coal--Carbonization)

BARKHATINOVA, T.G.; POPOV, N.A.; FATEYEV, A.A.; FRISHBERG, V.D.

Distinction between low caking and noncaking coals in the Kuznetsk Basin. Koks i khim. no.8:3-4 '61. (MIRA 15:1)

1. Vostochnyy uglekhimicheskiy institut.
(Kuznetsk Basin--Coal)

FRISHBERG, V.D.

Pechora Basin coals as resources of raw materials for coking. Koks i khim. no.2:13-15 '62. (MIRA 15:3)

1. Vostochnyy uglekhimicheskiy institut.
(Pechora Basin—Coals)

OSTROUKHOV, M.Ya.; PANCHENKO, S.I.; Prinimali uchastiye: FRISHBERG, V.D.; PETROV, V.K.; RESHETKO, A.; VYATKIN, G.P.; BRATCHENKO, V.P.; FOFANOV, A.A.; MILYAYEV, M.N.; PRIVALOV, V.Ye.; MUSTAFIN, F.A.; PUSHKASH, I.I.; LAZAREV, B.L.

Experimental blast furnace smelting using coke from wet preparation coals. [Sbor. trud.] Nauch.-issl.inst.met. no.4:63-70 '61. (MIRA 15:11)

1. Vostochnyy uglekhimicheskiy institut (for Ostroukhov, Panchenko, Frishberg, Petrov, Reshetko). 2. Nauchno-issledovatel'skiy institut metallurgii (for Vyatkin, Bratchenko). 3. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Privalov, Mustafin, Pushkash, Lazarev).

(Blast furnaces—Testing)
(Coke—Testing)

MIROSHNICHENKO, A.M., kand. tekhn. nauk; PANCHENKO, S.I., doktor tekhn. nauk; SHTROMBERG, B.I., kand. tekhn. nauk; FRISHBERG, V.D., kand. tekhn. nauk; BAYDALINOV, P.A., inzh.; GRYAZNOV, N.S., doktor tekhn. nauk; ZASHKVARA, V.G., doktor tekhn. nauk; LAZOVSKIY, I.M., kand. tekhn. nauk; MARINICHEV, B.T., inzh.; FEL'DBRIN, M.G., kand. tekhn. nauk; BAKUN, N.A., inzh.; BARATS, B.M., inzh.; VOZNYY, G.F., kand. tekhn. nauk; MIKHAL'CHUK, A.M., inzh.; TOPORKOV, V.Ya., kand. tekhn. nauk; FLORINSKIY, N.V., inzh.; KHAYET, A.N., inzh.; SHELKOV, A.K., inzh., red.; ARONOV, S.G., doktor tekhn.nauk, red.; PREOBRAZHENSKIY, P.I., inzh., red.

[Manual for coke chemists in six volumes] Spravochnik koksokhimika v shesti tomakh. Moskva, Izd-vo "Metallurgiia." Vol.1. [Source of raw materials and preparation of coal for coking] Syr'evaia baza i podgotovka uglei k koksovaniiu. 1964. 490 p. (MIRA 17:5)

L 08053-67 EWT(1)/EWP(m) WW
ACC NR: AP6031993 SOURCE CODE: UR/0023/66/000/002/0207/0210

AUTHOR: Frishman, F.--Frisman, F. 51 B

ORG: Institute of Thermophysics and Electrophysics, Academy of Sciences, Estonian SSR (Institut termofiziki i elektrofiziki Akademii nauk Estonskoy SSR)

TITLE: Mixing processes in a system of two parallel jets

SOURCE: AN EstSSR. Izvestiya. Seriya fiziko-matematicheskikh i tekhnicheskikh nauk, no. 2, 1966, 207-210

TOPIC TAGS: heat conduction, jet flow, parallel jet system

ABSTRACT: An attempt has been made to explain the possibility of using a method of "Equivalent task" of the theory of heat conduction for finding concentration fields in a binary system of two-dimensional jet flows with parallel axes. The results obtained are in satisfactory agreement with experimental findings. The study has been carried out at the Institute of Thermophysics and Electrophysics, Academy of Sciences, Estonian SSR under the guidance of Yu. Ivanov, Doctor of Technical Sciences. Orig. art. has: 3 figures and 8 formulas. [Based on author's abstract]
SUB CODE: 20/ SUBM DATE: 22Jun65/ ORIG REF: 002/

Card 1/1 mc

FRISCHMANN, G.

621.396.43

90/60 Line problems in connection with the establishment of a broad-band microwave network. G. Frischmann. *Magyar Híradástechnika*, Vol. 10, 1960, No. 3, pp. 86—102, 16 figs., 3 tabs.

A broad-band microwave network is being constructed for the purpose of transmitting TV programs and a large number of speech channels. The paper surveys the insertion of microwave systems into the state telecommunication network, the changing-over and tapping of nodes, the transmission of TV programs and some operational problems. At present the microwave equipments are being constructed for 240 channels but they can be enlarged to 600 channels. The highest transmitted frequencies are 1052 kcps. and 2540 kcps. The number of channels and the transmitted frequency band should be altered in accordance with the latest decisions of the CCI. Group change-over filters are used in order to eliminate crosstalk when changing over a group of channels to an other system. Besides changing over, the tapping of circuits may also be required; this is carried out by using adequate filters, blocking the tapped frequency in the main line and letting all other frequencies pass unrestrained. The quality of transmission is ensured by a pilot frequency. A separate equipment checks the continuous operation and the changing over to an emergency power supply.

FRISHKO, K. N.

MD

Effect of vitamins on opening of resting buds. S. O. Grebinskiĭ, L. A. Lyukova, and K. N. Frishko (I. Franko State Univ., Lvov). *Doklady Akad. Nauk S.S.S.R.* 105, 1361–3(1955).—Injection of aq. solns. of thiamine or nicotinic acid significantly accelerated the opening of dormant buds of chestnut, oak, magnolia, linden, apple, cherry, and lilac plants. No difference was found between the action of 1 or 10 γ/ml. concns. At 100 γ/ml. the buds browned and died, however. Thiamine and its HCl salt gave identical results. The above solns. are somewhat more effective than exposure to 1% C_2H_2 for 24 hrs. Bud opening is accompanied by a rise of thiamine content as shown earlier (Ermakov *et al.*, *Metody Biokhim. Issledovan. Rastenii*, 1952).
G. M. Kosolapoff

FRISHMAN, A.I., inzhener; PROKHOROV, M.V., inzhener.

Mechanization and automation in manufacturing electric motors at the "Vol'ta" Plant. Vest.elektroprom. 27 no.11:17-21 N '56. (MLRA 9:12)

1. Zavod "Vol'ta" (for Frishman). 2. Nauchno-issledovatel'skiy institut Ministerstva elektropromyshlennosti (for Prokhorov).
(Electric motors) (Metalworking machinery)
(Automatic control)

FRISHMAN, A. V.

SHF Electron-Beam Instrument, Patent, Class 21d. 13_{01}. No 103252; Elektrosvyaz' No 1, Jan 57.

FRISHMAN D.I.

USSR/Miscellaneous - Communication work planning

Card 1/1 Pub. 133 - 8/23

Authors : Frishman, D. I., Head of the Planning and Finance Division of the Kharkov Regional Communications Office

Title : Methods for improving the planning of work and efficiency of the district communications bureaus

Periodical : Vest. svyazi 8, 13-14, Aug 1954

Abstract : The deficiencies in planning and making out yearly programs of work of the district communications bureaus are analyzed. The analysis indicated that the main reason for these deficiencies is the inexperience and lack of training of executive personnel. Only one out of the 33 managers of the Kharkov Regional Communications Offices was graduated from a technical high school, while the rest have never finished junior high or even the grade schools. The author suggests improving the system of training managerial personnel, as well as the revision of training programs.

Institution : ...

Submitted : ...

4

FRISMAN, E. V., VOROBYEV, V. I., SHCHAGINA, L. V., YANOVKSAYA, N. K. and AKSENOVA, N. N.

"Dynamic Double Refraction of Nucleic Acid Solutions." pp. 79

Physics Institute of the Leningrad State University, Laboratory of Cytology of Malignant Growth, and Institute of Cytology of the Academy of Sciences USSR

II Nauchnaya Konferentsiya Institologii AN SSSR. Tezisy Dokladov (Second Scientific Conference of the Institute of Cytology of the Academy of Sciences USSR, Abstracts of Reports), Leningrad, 1962, 88 pp.

JPRS 20,634

SYUY MAO [Hsü Mao]; FRISMAN, E.V.

Light scattering and viscosity of polyparachlorostyrene solutions in butanone. Vysokom. soed. 4 no.12:1839-1843 D '62. (MIRA 15:12)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gosudarstvennogo universiteta.
(Styrene polymers)
(Light--Scattering) (Viscosity)

FRISMAN, E.V.; VOROB'YEV, V.I.; SHCHAGINA, L.V.; YANOVSKAYA, N.K.

Dynamic birefrigence in deoxyribonucleic acid (DNA) solutions. Part 2: Effect of thermal denaturation and ionic strength of the solution on the structure of DNA macromolecules. Vysokom.soed. 5 no.4:622-627 Ap '63. (MIRA 16:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta i Institut tsitologii AN SSSR.
(Nucleic acids--Optical properties)

FRISMAN, E.V.; VOROB'YEV, V.I.; YANOVSKAYA, N.K.; SHCHAGINA, L.V.

Studying the molecular structure of ribonucleic acid by the method of dynamic birefringence. Biokhimiia 28 no.1:137-144 Ja-F '63. (MIRA 16:4)

1. Physical Institute of the State University and Institute of Cytology, Academy of Sciences of the U.S.S.R., Leningrad.
(NUCLEIC ACIDS) (REFRACTION, DOUBLE)

FRISMAN, E.V.; DADIVANYAN, A.K.; DYUZHEV, G.A.

Determining the optical anisotropy of macromolecules. Dokl. AN SSSR 153 no.5:1062-1064 D '63. (MIRA 17:1)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. Zhdanova. Predstavleno akademikom A.N. Tereninym.

FRISMAN, E.V.; SYUY MAO [Hsü Mao]

Effect of deformation on the optical and hydrodynamic behavior of macromolecules in solution. Vysokom. soed. 6 no.1:34-40 Ja'64. (MIRA 17:5)

1. Fizicheskiy institut Leningradskogo gosuderstvennogo universiteta.

FRISMAN, F.V.; SYUY MAO [Hsü Mao]

Effect of the intrinsic viscosity of macromolecules on their deformability in the flow. Vyskom. soed. 6 no.1:41-46 Ja'64. (MIRA 17:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennog universiteta.

FRISMAN, E.V., VOROB'YEV, V.I.; SHCHAGINA, L.V.

Flow birefringence in solutions of deoxyribonucleic acid. Part 3: Dependence of the optical anisotropy of deoxyribonucleic acid molecules on the molecular weight. Vysokom.soed. 6 no. 5: 884-890 My '64. (MIRA 17:6)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova i Institut tsitologii AN SSSR.

L 44234-66 EWT(1)/EWP(m)

ACC NR: AP6022181 SOURCE CODE: UR/0023/66/000/001/0076/0080

AUTHOR: Frishman, F.

ORG: Institute of Thermophysics and Electrophysics, Academy of Sciences Estonian SSR (Institut termofiziki i elektrofiziki akademii nauk Estonskoy SSR)

TITLE: Effect of the initial velocity profile on the development of a plane-parallel submerged turbulent jet

SOURCE: AN EstSSR. Izv. Ser vi-matem i tekhn n, no. 1, 1966, 76-80

TOPIC TAGS: turbulent jet, velocity profile, boundary layer, linear equation, heat conduction, motion equation

ABSTRACT: A method of calculation has been proposed for a free plane-parallel jet with a nonuniform initial velocity profile, based on the conception of the asymptotic nature of the boundary layer. The basic equation is a linear equation of motion transformed into the typical equation of heat conduction in imaginary space. As the

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L 1.1 31-65

ACC NR: AP6022181

experiment implies, the function of transformation from imaginary to real space does not depend on the form of the initial velocity profile. Orig. art. has: 2 figures and 9 formulas. [Based on author' s abstract] [NT]

SUB CODE: 20/ SUBM DATE: 02Jul65/ ORIG REF: 003/

Card 2/2 MT

ACC NR: AP6032238 SOURCE CODE: UR/0023/66/000/003/0416/0422

AUTHOR: Frishman, F.—Frisman, F.

ORG: Institute of Thermophysics and Electrophysics, Academy of Sciences Estonian SSR (Institut termofiziki i elektrofiziki Akademii nauk Estonskoy SSR)

TITLE: Interaction of jets discharging from two rectangular, parallel, nozzles with a small gap

SOURCE: AN EstSSR. Izvestiya. Seriya fiziko-matematicheskikh i tekhnicheskikh nauk, no. 3, 1966, 416-422

TOPIC TAGS: gas jet, jet mixing, combustion, combustion chamber, nozzle flow, jet flow, flow velocity

ABSTRACT: The interaction of jets is important for designing burners for the combustion of pulverized coal, combustion chambers, combustion devices using fuel in thin jets, etc. Previous studies, however, have dealt mostly with the interaction of jets having identical discharge velocities. L. A. Vulis (Izv. AN Kaz.SSR, Ser. energetich., vyp. 2(18), 60-67, 1960) showed that the problem can be solved by linearization of the equation of motion. In the present study, which uses this approach, a previous analysis by Ustimenko (Izv. AN Kaz.SSR. Ser. energetich., vyp. 2(18), 68-83, 1960) was expanded and a method was developed for

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two jets at the outlet, respectively; τ is a longitudinal coordinate in hypothetical space; d is the relative thickness of the boundary

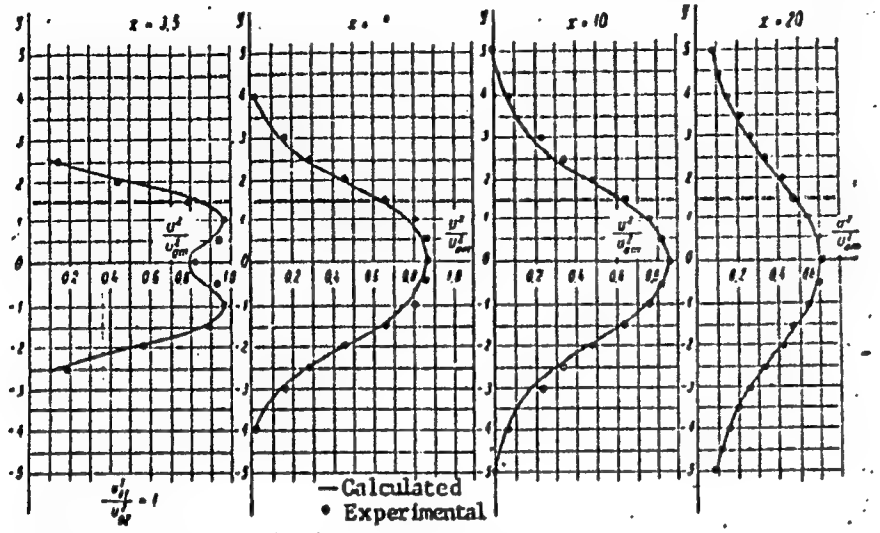


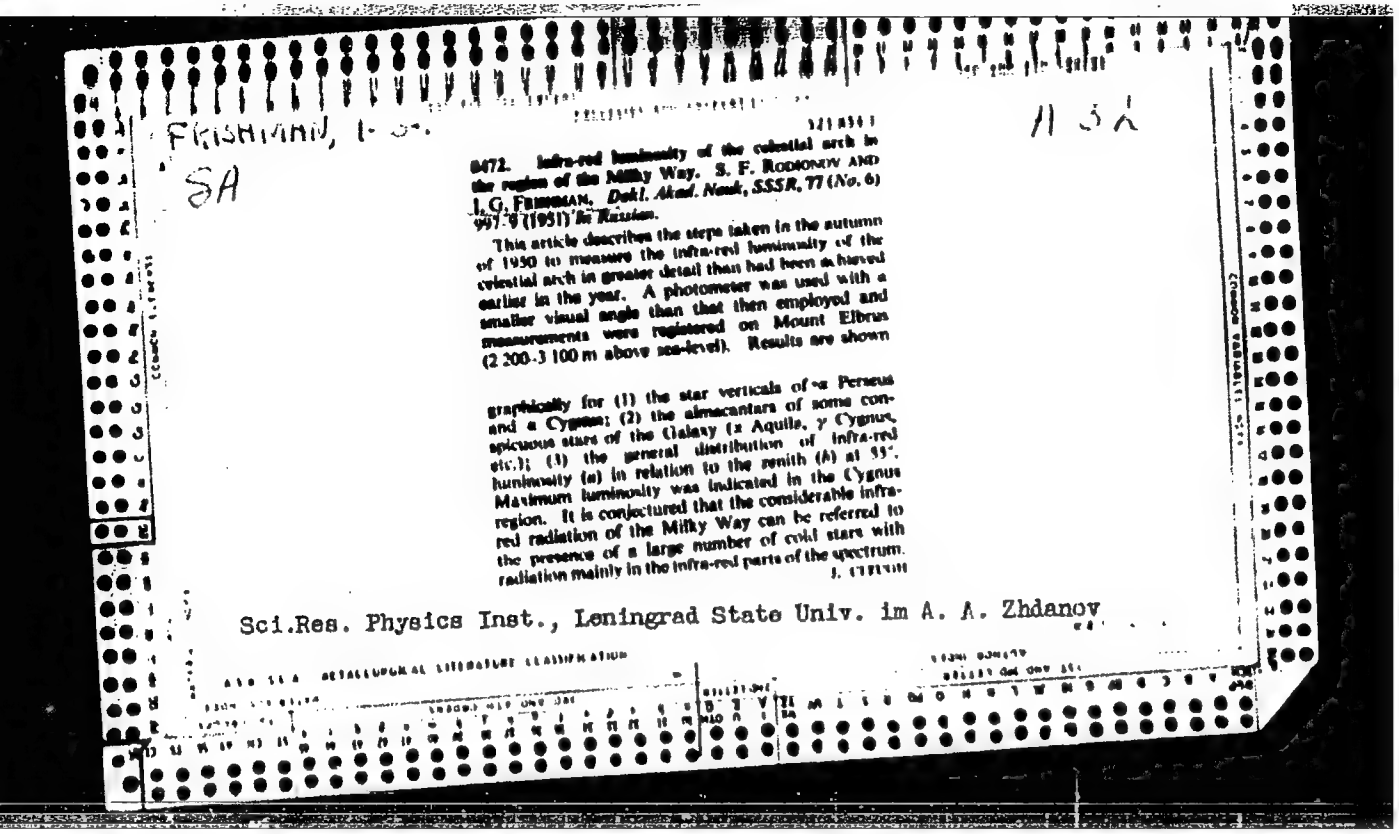
Fig. 1. Profiles of velocity heads in the cross section at m = 1 (ratio of velocity heads at outlet from nozzles)

ACC NR: AP6032238

layer; a_1 and a_2 are parameters characterizing the parabolic velocity head profile at the outlet from the nozzles; L, relative height of the nozzle; x and y, coordinates; and δ is the hypothetical gap between nozzles. Orig. art. has: 5 figures and 9 formulas.

SUB CODE: 21/ SUBM DATE: 03Jan66/ ORIG REF: 005

Card 4/4



FRISHMAN, I. G.

SA

11 52

8472. Infra-red luminosity of the celestial arch in the region of the Milky Way. S. F. RODIONOV AND I. G. FRISHMAN. *Dokl. Akad. Nauk, SSSR*, 77 (No. 6) 997-9 (1951) In Russian.

This article describes the steps taken in the autumn of 1950 to measure the infra-red luminosity of the celestial arch in greater detail than had been achieved earlier in the year. A photometer was used with a smaller visual angle than that then employed and measurements were registered on Mount Elbrus (2 200-3 100 m above sea-level). Results are shown graphically for (1) the star verticals of α Persei and α Cygni; (2) the almucantars of some conspicuous stars of the Galaxy (α Aquilæ, γ Cygni, etc.); (3) the general distribution of infra-red luminosity (a) in relation to the zenith (A) at 55°. Maximum luminosity was indicated in the Cygnus region. It is conjectured that the considerable infra-red radiation of the Milky Way can be referred to the presence of a large number of cold stars with radiation mainly in the infra-red parts of the spectrum. J. (illegible)

Sci.Res. Physics Inst., Leningrad State Univ. im A. A. Zhdanov

SOV-120-58-1-32/43

AUTHOR: Frishman, I. G.

TITLE: A Fast Electro-photometer for Measuring the Brightness of the Aurora Polaris (Skorostnoy elektrofotometr dlya izmereniya yarkosti polyarnykh siyaniy)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 1, pp 128-130 (USSR)

ABSTRACT: The main difficulty associated with the photometry of aurora polaris is small and rapidly changing brightness. It is therefore usual to photometer one or two lines or bands of the spectrum since the use of electro-photometers with galvanometers as recording instruments does not allow simultaneous studies of several lines or bands. It is essential to be able to obtain absolute intensities and to study the re-distribution of energy in the spectra of aurorae during rapid changes of intensity and form. In order to do this it is necessary to carry out the measurement sufficiently rapidly so that during a series of measurements the intensity does not change. The electro-photometer described in this paper may be used to carry out such measurements with high accuracy. A schematic diagram of the electro-photometer is shown in Fig.1. The apparatus consists of

Card 1/3 a mirror at 45° to the axis and rotatable about the latter,

A Fast Electro-photometer for Measuring the Brightness of the Aurora Polaris.

followed by an objective lens (25 cm in diameter; focal length 50 cm) and a Fabry lens placed behind a stop. The latter lens forms an image of the objective on the photocathode of a photomultiplier. The stop is variable so that a wide solid angle can be obtained if necessary. A shutter in the form of a disc containing 10 apertures is placed immediately in front of the photocathode. Interference filters placed in these apertures transmit narrow wavelength bands. The shutter is attached to a synchronous motor and can be rotated with a speed of one rev/sec. Thus modulation of the light flux and the exchange of the light filters is obtained using a single disc.. If there were no filters the modulation frequency would be 10 c/s. However, since the flux through a light filter may have any magnitude, the current pulses from the photomultiplier are in general different. It follows that the time constant of the amplifier should be sufficiently small. The amplifier (Fig.2) is in the form of a three stage AC amplifier using 6ZhZP valves. The first stage (pre-amplifier) is included

SOV-120-58-1-32/43

A Fast Electro-photometer for Measuring the Brightness of the Aurora Polaris.

in the same box with the photomultiplier. The second stage is a voltage amplifier working at a frequency of 10 c/s with a band of 15 c/s. An RC filter is used and is shown on the right of Fig.2. The final stage is a current amplifier with large gain. To obtain absolute intensity the instrument was first calibrated. The photometer as a whole has a high sensitivity and can be used to measure not only intensities of aurorae but also the emission of the night sky, i.e. intensities of the order of 10^{-4} erg/sec cm^2 sterad. The photometry of aurorae may be carried out with an accuracy of 5%. There are 3 figures and no references.

ASSOCIATION: Murmanskoye otdeleniye NIZMIR (Murmansk Branch of NIZMIR)

SUBMITTED: July 31, 1957.

1. Aurorae--Spectra 2. Photometers--Performance 3. Photometers--Equipment 4. Photomultipliers--Performance

Card 3/3

SOV/51-6-3-7/28

AUTHOR: Frishman, I.G.

TITLE: Distribution of Energy in the Spectra of Aurora Borealis in the Region 3900 - 8700 Å (Raspredeleniye energii v spektrakh polyarnykh siyaniy v oblasti 3900 - 8700 Å)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 3, pp 323-328 (USSR)

ABSTRACT: Since 1954 the author has been carrying out regular photoelectric measurements of the absolute luminance (brightness) of aurora borealis in a wide spectral region. Between 1954 and 1956 he used a photometer (No.1) whose electric part was developed at the Photometry Laboratory NIFI of the Leningrad State University (Ref.2). This photometer was used together with six narrow-band filters (half-widths 150 Å) which covered the region 5500 - 8700 Å. The transmission maxima of these filters corresponded to the positions of the strongest lines and bands in this region of the spectrum: 5577, 6300, 7200, 7700, 7900 and 8680 Å. One series of measurements took 1.5 minutes. From 1956 the author used a new photometer (No.2) developed by himself and described

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Distribution of Energy in the Spectra of Aurora Borealis in the Region 3900 - 8700 Å

in Ref.5. Photometer No.2 was used with three interference filters (half-widths 120 Å) which were employed to separate out the 3914 and 4278 Å bands and the 5577 A line. One series of measurements with photometer No.2 took 1 second. Both photometers were calibrated in absolute units. The photometer No.2 was used in conjunction with a photomultiplier FEU-19, which was much more sensitive than FEU-22 used with the photometer No.1. As a result the sensitivity of the photometer No.2 was forty times higher than that of photometer No.1 when the 5577 Å line was measured. The author allowed for atmospheric absorption by carrying out every night one calibration measurement of luminance due to moon or Jupiter (Ref.6). Minimum luminance of the green line at 5577 Å was found to be 3×10^{-4} erg sec^{-1} cm^{-1} $steradian^{-1}$, and maximum luminance of the same line was 11×10^{-2} erg sec^{-1} cm^{-1} $steradian^{-1}$. Absolute luminances of the other measured lines and bands were of the same order. Table 2 gives certain typical absolute luminances. Relative luminances of lines and bands (with the luminance of the 5577 Å line taken as 100) are given in

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Table 3 for four types of aurora observed at Murmansk: diffuse "bows", radial "bows", "curtains", and diffuse aurora. The left-hand column under each wavelength in Table 3 gives the mean relative luminance and the right-hand column gives the minimum and maximum values. Acknowledgments are made to S.F. Rodionov for his advice. There are 3 tables, 2 figures and 15 references, of which 5 are Soviet, 8 English, 1 German and 1 French.

SUBMITTED: September 22, 1958

SOV/51-7-4-28/32

AUTHOR: Frishman, I.G.

TITLE: Recording of Auroral Spectra Using a Photoelectric Spectrometer

PERIODICAL: Optika i spektroskopiya, Vol 7, Nr 4, pp 574-575 (USSR)

ABSTRACT: The author constructed a simple spectrometer based on a mirror monochromator with a diffraction grating (600 lines/mm, working area 17 x 80 mm, second order) produced in the workshops of the Physics Institute at the Leningrad State University (NIFI LGU). The focal lengths of the collimator mirrors and of the camera were 700 mm. The exit and entry slits were 16 mm high. In the green region the monochromator had dispersion of 11.4 Å/mm. With 1 mm wide slits the monochromator collected radiation from 0.1 square degrees of the sky. A photomultiplier FEU-19-M, working at 1300 V, was used as a receiver; it was calibrated in absolute units. The photomultiplier current was amplified by means of a resonance amplifier tuned to 238 c/s, which was the frequency employed to interrupt the incident beam by means of a rotating disk. The amplified photocurrents were recorded by means of a string oscillograph POB-12. Auroral spectrum in the region 3914-5577 Å was recorded in 77 sec; this rate could be increased at least five times. Fig 1 shows a record of the spectrum of barely

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visible diffuse emission in the region 3914-5577 Å. The absolute intensities of the lines shown in Fig 1 were 13, 0.5, 4 and 17.x 10^{-4}erg. $sec^{-1}.cm^{-2}.sterad^{-1}$ for 5577, 4709, 4278 and 3914 Å respectively. Fig 2 shows the spectrum (3914-4708 Å) of a diffuse auroral emission in the southern part of the sky. A small peak corresponding to the H_β line (8 x 10^{-5}erg.$sec^{-1}.cm^{-2}.sterad^{-1}$ intensity) can be seen in the lower part of Fig 2. There are 2 figures and 5 references, 4 of which are Soviet and 1 English.

SUBMITTED: April 25, 1959

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FRISHMAN, I. G. Cand Phys-Math Sci -- "Distribution of energy in the spectra of polar auroras." Len, 1960. (Len Order of Lenin State Univ im A. A. Zhdanov). (KL, 1-61, 181)

30894

18.1540

S/180/61/000/005/004/018
E021/E180

AUTHORS: Mikulinskiy, A.S., and Frishberg, I.V. (Sverdlovsk)

TITLE: The possibility of obtaining liquid magnesium by condensation of a mixture of magnesium vapour and argon at atmospheric pressure

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo. no.5, 1961, 28-30 (+ 1 plate)

TEXT: Experiments were carried out using the apparatus shown in Fig.1. This consists of a sealed flask 5 with an external heating 3. The reaction tube 7 with ground-in lid 6 is placed inside. A crucible 4 with a 10g sample of metal is suspended from the lid. There are also two thermocouples 8 inside the reaction tube. The temperature in the hot zone can be controlled to ±10 °C. The walls of the tube are cooled naturally and the temperature of the walls gradually decreases from the hot zone downwards. The length of the tube is 300 mm and the zone of evaporation 60 mm. The magnesium is preliminarily degassed at

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400 °C in vacuo. Then purified argon is fed in and the temperature is allowed to increase. An appreciable amount of metal begins to evaporate as the melting point is approached. Atmospheric pressure is maintained. After holding for 2 hours at the required temperature, the heater is switched off and the tube is quickly cooled in air. The evaporating temperature, the variation in temperature along the tube, the diameter of the reaction tube and the size of the condensation surface were varied in the experiments. Results showed that a similar amount of metal was condensed at atmospheric pressure and 900-1000 °C as at 0.1-0.2 mm Hg and 475-550 °C. A decrease in length of the high temperature zone by a factor of 1.3 resulted in a decrease in yield of compact metal by a factor of 1.4. Thus the experiments indicated the possibility of obtaining compact magnesium by condensation from a mixture of magnesium vapour and argon at atmospheric pressure. There are 2 figures, 1 table and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The English language references read as follows:

Ref.2: F.E. Block, T.T. Campbell. Producing magnesium by silicothermic reduction. U.S.Bureau Mines Report

30894
S/180/61/000/005/004/018
The possibility of obtaining liquid... E021/E180

Investigations, 1956, 5275.
Ref.3: J.J. Betcherman, L.M. Pidgeon. The physical nature of solid condensates produced in the distillation of volatile metals. Canad. Mining and Metallurg. Bull., 1951, 475, 44.

SUBMITTED: March 25, 1961

X

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43815

S/020/62/147/004/025/027
B101/B186

11.1520

AUTHORS: Frishberg, I.V., Mikulinskiy, A.S.

TITLE: Variation in the mass transfer coefficient for magnesium vapor condensation from a mixture with helium

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 4, 1962, 886-888

TEXT: The condensation of magnesium vapor mixed with helium was determined at atmospheric pressure and at a flow rate of 1 cm/sec. Details of the method used for the purpose will be described in a paper that is now being printed. In the first series of experiments, the concentration of magnesium in the vapor and on the condenser surface was altered by varying the temperature of condensation. In the second series, only the surface temperature of the condenser was varied, the initial partial pressure of the magnesium being kept constant. The mass transfer coefficient was calculated from $q = (\alpha p/RT_c) \ln[(p - p_c)/(p - p_1)]$, where $\alpha = D/\delta$ cm/sec; D = diffusion coefficient, cm^2/sec; δ = thickness of the diffusion layer. The second series showed α to be a linear function of T_c. The results of the first series indicate that α probably depends

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exponentially on Δp. Hence $\log\alpha = 1.1537 - 0.331 \cdot 10^3/T_c$, wherefrom δ is obtained as $p^{-0.08}$. There are 2 figures and 1 table. The English-language reference is: R.S. Cvetanvic, D.I. Le Roy, J.Chem.Phys., 20, 343 (1952).

ASSOCIATION: Institut metallurgii Ural'skogo filiala Akademii nauk SSSR (Institute of Metallurgy of the Ural Branch of the Academy of Sciences USSR)

PRESENTED: July 16, 1962, by S.I. Vol'fkovich, Academician

SUBMITTED: July 12, 1962

FRISHBERG, I.V.; MIKULINSKIY, A.S.

Study of the kinetics of magnesium vapor condensation and the design of a condenser with variable temperature. Zhur. prikl. khim. 36 no.5:949-953 My '63. (MIRA 16:8)

(Magnesium) (Condensers (Vapor and gases))

FRISHMAN,M.A., kandidat tekhnicheskikh nauk

Taking motion pictures in experimental studies of the interaction of track and rolling stock. Tekh.zhel.dor.6 no.9:25-26 S'47. (Railroads--Rails) (MLRA 8:12)

FRISHMAN, M.A., professor, doktor tekhnicheskikh nauk; KARAMYSHEV, I.A., redaktor; YARINA, G.P., tekhnicheskiy redaktor.

[Investigating the interaction of track and rolling stock by means of motion pictures] Issledovaniia vzaimodeistviia puti i podvizhnogo sostava metodom kinos"emki. Moskva, Gos. transport. zheleznodorozh. izd-vo, 1953. 114 p. [Microfilm] (MLRA 7:11)
(Railroads--Track)

FRISHMAN, M.A., professor, redaktor; SOROKIN, N.N., inzhener, redaktor; STIKHNO, T.V., tekhnicheskiy redaktor

[Experience in introducing new equipment and progressive work methods in track maintenance; practices of track workers on the Stalin, Southwestern, Southern and Odessa Railroads] Opyt vnedreniia novoi tekhniki i peredovykh metodov truda v putevom khoziaistve; opyt rabety puteitsev Stalinskoi, IUgo-Zapadnoi, IUzhnoi i Odesskoi zheleznykh dorog. Moskva, Gos.transp.shel-dor. izd-vo, 1956. 74 p. (MLRA 10:1)
(Railroads--Track)

BROMBERG, Ye.M., kandidat tekhnicheskikh nauk; VERIGO, M.F., professor; DANILOV, V.N., professor; FRISHMAN, M.A., professor; SOROKIN, N.N., inzhenor, redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Interrelation of track and railroad rolling stock] Vzaimodeistvie puti i podvizhnogo sostava. Pod obshchei red. M.A.Frishmana. Moskva, Gos.transp.zhel-dor. izd-vo, 1956. 279 p. (MLRA 9:11)
(Railroads--Track)

FRISHMAN, M.A., doktor tekhnicheskikh nauk; RABINOVICH, G.D., kandidat tekhnicheskikh nauk.

Reinforced concrete ties for automatic block system rail circuits. (MLRA 10:5)
Avtom., telem. i sviaz' no.4:25-28 Ap '57.
(Railroads--Ties, Concrete)
(Railroads--Signaling--Block system)

FRISHMAN, M.A., professor; RABINOVICH, O.D., kandidat tekhnicheskikh nauk; OLSHNIKOVA, T.M., inzhener.

Electric insulation for reinforced concrete ties. Put' i put.khoz. no.8:19 Ag '57. (MLRA 10:9)

(Railroads--Ties)

FRISHMAN, M.A., prof., doktor tekhn. nauk; VOLOSHKO, Yu.D., dots., kand. tekhn. nauk (Dnepropetrovsk).

Reinforced concrete ties used on sections having automatic block systems. Put' i put. khoz. no.2:21-22 F '58. (MIRA 11:3)
(Railroads--Ties, Concrete)

FRISHMAN, M.A., prof., doktor tekhn.nauk; KOLESNIKOV, P.I., dots.,kand. tekhn.nauk

Investigating interaction of car wheels and frame rails during sliding movement through switches. Trudy DIIT no.27:5-30 '58. (MIRA 12:1)

(Car wheels) (Railroads--Rails)

FRISHMAN, M.A., prof., doktor tekhn.nauk (Dnepropetrovsk); ISAKOV, I.F., kand.tekhn.nauk (Dnepropetrovsk); VOLOSHKO, Yu.D., kand.tekhn.nauk (Dnepropetrovsk)

Characteristics of designing track on reinforced concrete ties. Zhel.dor.transp. 40 no.10:55-57 O '58. (MIRA 11:12)
(Railroads--Track) (Railroads--Ties, Concrete)

FRISHMAN M. A.

AL'BREKHT, Vladimir Georgiyevich, prof.; LIDERS, Georgiy Vladimirovich, dotsent; NIKIFOROV, Pavel Aleksandrovich, prof. [deceased]; CHLENOV, Mikhail Timofeyevich, kand.tekhn.nauk; CHERNYSHEV, Mikhail Andreyevich, kand.tekhn.nauk; FRISHMAN, M.A., prof., retsenzent; ANDREYCHENKO, A.V., inzh., retsenzent; BABKIN, A.R., inzh., retsenzent; BEZRUCHKO, V.S., inzh., retsenzent; ZHEREBIN, M.I., inzh., retsenzent; MEL'NIK, D.M., inzh., retsenzent; MURAV'YEV, I.V., inzh., retsenzent; NOVITSKIY, G.I., inzh., retsenzent; PASHININ, S.A., inzh., retsenzent; POTOTSKIY, G.I., inzh., retsenzent, red.; RAK, S.M., inzh., retsenzent; TYUTYUNNIK, F.R., inzh., retsenzent; ULYUYEV, D.I., inzh., retsenzent; SHEPELEV, V.N., inzh., retsenzent; BOBROVA, Ye.N., tekhn.red.

[Track work] Putevoe khoziaistvo. Pod red. M.A.Chernysheva. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 435 p. (MIRA 12:12)

1. Kafedra "Put' i putevoye khozyaystvo" Dnepropetrovskogo instituta inzhenerov zheleznodorozhnogo transporta (for Frishman).
(Railroads--Track)

YELSAKOV, N.N., inzh.; FRISHMAN, M.A., prof.; ALEKSEYEV, Ya.K.

Transitional platings or rails? Put' i put. khoz. no.6:25 Je '59.
(MIRA 12:10)

1.Nachal'nik strelochnogo zavoda, Dnepropetrovsk (for Alekseyev).
(Railroads--Rails--Fastenings)

FRISHMAN, M.A., prof., doktor tekhn. nauk; RABINOVICH, G.D., kand. tekhn. nauk

Experimental fastenings for reinforced concrete ties for use on a track circuit territory. Zhel. dor. transp. 41 no.10:54-55 O '59. (MIRA 13:2)

(Railroads--Ties, Concrete)

LAZARYAN, V.A., prof.; FRISHMAN, M.A.; L'VOV, A.A., kand.tekhn.nauk; LIPOVSKIY, R.S., inzh.; BERMAN, Z.G., inzh.; LEVANKOV, I.S., inzh.

Wheel and rail interaction forces caused by short-distance unevenness of the track. Vest.TSNII MPS 19 no.6:9-12 '60. (MIRA 13:9)

1. Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo transporta.
(Railroads--Rails) (Car wheels)